



Association of Bay Area Governments
Bay Area Air Quality Management District
Metropolitan Transportation Commission

Joint Policy Committee

PLANNING RESOURCES

Indicators, Monitoring and Mapping

Tool or Topic: **Geographic Information Systems**

Author

Organization

Published

Format

Title: At Risk: The Bay Area's Greenbelt

Steinbach

Greenbelt Alliance

1/1/2000

PDF file

[#http://www.greenbelt.org/downloads/resources/report_atrisk2000.pdf#](http://www.greenbelt.org/downloads/resources/report_atrisk2000.pdf)

Description:

A survey of the status of all open land in the region, showing that nearly 500,000 greenbelt acres could be paved by sprawl in the next 30 years. Contains detailed statistics and computer-based maps for each county.

Title page can be downloaded separately.

Tool or Topic: **Geographic Information Systems**

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Published

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Title: Estimating and Analyzing Land Supply Development Capacity

Moudon

Lincoln Institute of Land Policy

5/1/2001

[#http://www.lincolninst.edu/pubs/pub-detail.asp?id=103#](http://www.lincolninst.edu/pubs/pub-detail.asp?id=103#)

Description:

This paper describes a method to estimate the land supply and development capacity of an urban area. The method, which draws from those devised by the City of Seattle, is applied to a portion of the city using parcel-level data with GIS software. Steps to estimate supply and capacity include the identification of all buildable lands (vacant, partially utilized, and underutilized lands) and the calculation of the development capacity of each one of these types of lands, taking into account zoning categories. Southeast Seattle has 11 percent and 17 percent of its net land supply in vacant or refill lands, respectively. It has the potential to increase its residential capacity by 57 percent, and its employment capacity by more than 80 percent. Analyses suggest that the potential for mixed-use development and redevelopment may be hindered by the relatively high supply of both vacant and refill lands in the lower-density residential zones presently preferred by both producers and consumers. Analyses also show that the criteria used to identify refill lands can have a substantial effect on development capacity estimates. This indicates that planners need to carefully test the criteria selected before performing final capacity estimates. Finally, this case study shows that while the structure and steps of land supply and capacity analysis are reasonably straightforward, the handling of the database requires special skills that many planners presently lack.

Tool or Topic: **Geographic Information Systems**AuthorOrganizationPublishedFormat

Title: Metro's Regional Land Information System: The Virtual Key to Portland's Growth Management Success

Knaap

Lincoln Institute of Land Policy

11/1/2003 PDF file

[#http://www.lincolninst.edu/pubs/pub-detail.asp?id=862#](http://www.lincolninst.edu/pubs/pub-detail.asp?id=862#)

Description:

Though metropolitan Portland, Oregon, has perhaps the best-known growth management program in the world, one of the most important elements of that system has been conspicuously overlooked: the regional land information system (RLIS). Since RLIS was developed in the late 1980s, it has played a critical role in the development of every significant plan, the evaluation of every key policy, and the formulation of every major development model. RLIS created conditions that enabled a sophisticated and now much-studied approach to metropolitan growth management to emerge. In this paper, we discuss the development, use, and maintenance of RLIS, illustrating its importance for both the practice of regional planning and the advancement of planning research. We begin with an overview of planning at Metro, since it is that context that provides RLIS with much of its local and political meaning. We then examine the relationship of RLIS to specific Metro planning activities. We conclude that RLIS in particular, and regional GIS systems in general, have become vital to the success of urban growth management.

Tool or Topic: **Geographic Information Systems**

Author

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Published

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Title: Monitoring Land Supply with Geographic Information Systems: Theory, Practice and Parcel-Based Approaches

Moudon

Lincoln Institute of Land Policy

1/1/2000

Book

[#http://www.lincolninst.edu/pubs/pub-detail.asp?id=163#](http://www.lincolninst.edu/pubs/pub-detail.asp?id=163#)

Description:

Monitoring the supply of developable land and its capacity to accommodate growth within urbanizing regions is an increasingly important component of land use planning and growth management programs. This volume reviews the current state of the art in land monitoring, particularly new GIS tools and data resources. Chapters address technical and methodological frameworks for data collection, analysis and application to specific policy concerns; case studies of successful land monitoring programs; and thematic topics ranging from database design to urban simulation modeling. Appendices offer detailed findings of a national survey of land supply monitoring programs.

Tool or Topic: **Monitoring/Indicators**AuthorOrganizationPublishedFormat

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Tool or Topic: **Monitoring/Indicators**AuthorOrganizationPublishedFormat

Title: Land Market Monitoring for Smart Urban Growth

Knaap

Lincoln Institute of Land Policy

12/1/2001 Book

[#http://www.lincolninst.edu/pubs/pub-detail.asp?id=51#](http://www.lincolninst.edu/pubs/pub-detail.asp?id=51#)

Description:

The fundamental debate about urban growth—no growth, slow growth, go growth—will never be resolved, but there is a general agreement that it will occur, that it needs some type of management and that such management requires public policies. Disagreements revolve around how many and which policies to use, and how extensively to apply them. This book is motivated by the belief that measures such as the type, location, amount and rate of urban growth can be assembled, monitored and analyzed to gain a better understanding of urban growth processes and growth management policy. The chapter authors offer considerable insight into the state of the art and practice of land market monitoring—an important and emerging subfield of urban growth management.

Tool or Topic: **Monitoring/Indicators**AuthorOrganizationPublishedFormat

Title: Land Supply and Infrastructure Capacity Monitoring for Smart Urban Growth

Knaap

Lincoln Institute of Land Policy

11/1/2000 PDF file

[#http://www.lincolninst.edu/pubs/pub-detail.asp?id=96#](http://www.lincolninst.edu/pubs/pub-detail.asp?id=96#)

Description:

The fundamental debate about urban growth—No growth, slow growth, go growth?—will never be resolved. As with politics and religion, all are entitled to their opinions, most of which derive more from deeply held beliefs than quickly calculated betas. As with politics and religion, there is something like agreement among a majority of people on very general principles (e.g., civilized life in the 20th century requires some form of government; there are benefits to some type of spiritual relationship with the universe), but that agreement disintegrates when one gets to the specifics (e.g., socialism or capitalism, Republican or Democrat, deist or agnostic, Christian or Moslem).

For urban growth there is a general agreement that it will occur, that it needs some type of management, and that such management requires (at least in part) public policies. The disagreements about growth management are about how many and which policies to use, and how extensively to apply them. Growth management, however, has some measurable dimensions not available in metaphysics. The type, location, amount, and rate of urban growth can all be measured; so can other factors that are correlated with and perhaps cause urban growth. This paper is motivated by the belief that such measures can be assembled, monitored, and analyzed to gain a better understanding of urban growth processes and growth management policy.

Tool or Topic: **Monitoring/Indicators**AuthorOrganizationPublishedFormat

Title: Monitoring Land Supply with Geographic Information Systems: Theory, Practice and Parcel-Based Approaches

Moudon

Lincoln Institute of Land Policy

1/1/2000

Book

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Tool or Topic: **Monitoring/Indicators**AuthorOrganizationPublishedFormat

Title: Urban Sprawl in a U.S. Metropolitan Area: Ways to Measure and a Comparison of the Sacramento Area to Similar Metropolitan Areas in California & U.S.

Wassmer

Lincoln Institute of Land Policy

1/1/2000

PDF file

[#http://www.lincolninst.edu/pubs/pub-detail.asp?id=114#](http://www.lincolninst.edu/pubs/pub-detail.asp?id=114#)

Description:

For more than forty years, urban planners, environmentalists, and other social engineers have used the pejorative catch phrase of urban sprawl to categorize much of what Americans dislike about suburban life in U.S. metropolitan areas. In the early 1990s, coinciding with Joel Garreau's (1991) publication of *Edge City: Life on the New Frontier*, the term urban sprawl grew to common usage in the public's lexicon and is now a policy concern that is even debated at the national level. In his 1999 State of the Union Address, President Clinton devoted nearly 20 percent of his time to issues related to metropolitan development; he only spent more time on foreign policy. Vice President Al Gore, running for President in 2000, followed up with campaign speeches that attributed road rage, loss of fertile land, central city decay, and even a decline in family life to urban sprawl. Alternatively, Conservative commentators like Thomas Sowell (1999) and George Will (1999) attribute this national focus as the most recent crisis contrived by Liberals to justify government interference in what should be the private choices of where people and businesses locate.

Given this background, it is hard to find an individual or policymaker in any region in the United States who, at least publicly, favors urban sprawl. At the same time, it is equally difficult to find someone who can concisely define what urban sprawl is and how to best measure the degree to which it has occurred in a region. However, it is not hard to find an individual or policymaker in the United States concerned over the negative outcomes that are widely attributed to urban sprawl: loss of open space, traffic congestion, air pollution, a greater percentage of the poor living in the inner-city, central city blight, etc. To correctly test the causal connection between urban sprawl and these negative outcomes, ways are needed to measure the degree that urban sprawl has occurred in a metropolitan area like Sacramento. Once this measurement is chosen, factors cited as causes of urban sprawl can also be tested for validity, and if appropriate, these tests can then form the basis for public policies designed to reduce sprawl and the negative urban outcomes attributed to it.

Tool or Topic: **Monitoring/Indicators**AuthorOrganizationPublishedFormat

Title: Using Information to Drive Change: New Ways of Moving Markets

Sabety

The Brookings Institution

7/1/2004

PDF file

[#http://www.brookings.edu/metro/umi/framingpaper.htm#](http://www.brookings.edu/metro/umi/framingpaper.htm#)

Description:

Unleashing the potential of America's cities depends on developing a systematic view of how information influences market investment decisions, especially as America moves to a more knowledge-based economy. This brief examines the critical role of information in urban markets. It begins by describing the information cycle: how information is created, reported, collected, disseminated, and turned into "actionable knowledge" used to make investment decisions in urban areas. When critical information is not available, not accurate, or not used by market actors, an "information gap" exists. The authors postulate that closing this gap will help markets to function more effectively to build healthy communities, laying the basis for a robust investment climate, a vibrant labor market and residents with strong connections to the economic mainstream. The brief concludes by suggesting actions in three major areas to address the gap and introduces the Urban Markets Initiative program—an initiative to advance thought and practice in the field of urban information.